

## REMARKS

The following Remarks are in timely Reply to the final Office Action dated June 16, 2003 with a three month extension. In light of this Reply, the Applicants respectfully request reconsideration and further examination of this Application. 52 Claims are pending in this Application for reconsideration and further examination, of which six Claims (1, 11, 17, 24, 41 and 49) are independent.

### 35 USC § 102

In paragraph 2, page 2 of the Office Action, the Examiner rejected Claims 1-10, 14-17, 19-25, 27-32, 38-42, 46-53 and 55-58 under 35 U.S.C. 102(e) as being anticipated by Larky et al. (U.S. Pat. 6,389,495) ("Larky") stating, in pertinent part:

"As per *claim 1*, Larky discloses USB host system operationally coupled to a computing system with a main processor, comprising:

- a first processor (fig. 1,126) that implements a USB driver without using the main processor (fig. 1, 116) resources;(col. 4, lines 26-44)
- a downstream USB port;(fig.1,106)
- a communication area accessible both by the main processor and by the first processor such that the first processor interfaces with the main processor via the communication area using predefined records in predefined format(col.7, lines 21-67)
- wherein the main processor writes a data transfer request in the communication area in a pre-defined record format and the first processor schedules and completes the request via a USB host controller.(col. 4, lines 1-44)

In light of the Remarks that follow, this rejection is respectfully traversed.

#### Claim 1:

Larky does not teach or even suggest the limitations of independent Claim 1. In particular Larky does not teach "A USB host system operationally coupled to a computing system with a main processor, comprising: a first processor that implements a USB driver without using the main processor resources; a downstream USB port; and, a communication area directly accessible by both the main processor and the first processor such that the first processor interfaces with the main processor via the communication area using predefined records in pre-defined formats, wherein the main processor writes a data transfer request in the communication area in a pre-defined record format, and wherein the first processor schedules and completes the request via a USB host controller". [Claim 1]

Larky discusses "a circuit for use in a control system of a peripheral device (emphasis added) that is dedicated to tasks related to communication with a host computer via a universal serial bus (USB). The invention affords a USB dedicated circuit that is configured to allow a

host computer to recognize and enumerate a device as a USB configured device without the use of the device's micro-controller." [Larky Abstract].

Larky does not disclose a USB host system of the present invention, and instead discusses a USB dedicated circuit that is located in a peripheral device. This is shown in Figure 1 of Larky where the USB dedicated circuit 124 is a part of a device controller 104 and located in peripheral device 101. This is different than the USB host system of the present invention.

Applicants would like to direct the Examiner's attention to Figure 3 of the present application. In Figure 3, the USB host system 300 is coupled to main processor 310 and the USB devices 320 are coupled to USB host system. Larky's device 101 is one of the USB devices 320 each having the USB dedicated circuit 124 and is not the USB host system 300 (or 200).

Applicants also direct the Examiner's attention to Figure 2 of the present application. In Figure 2, the USB host system 200 has a processor 210, which is the first processor of Claim 1. Processor 210 runs the USB driver. This USB driver is run on the host side and not on the peripheral side (for example, in device 101(Figure 1 of Larky)). Based on the foregoing, Larky's processor 126 (Figure 1) as cited by the Examiner is different from the first processor 210 (Figure 2) of the present invention. Larky's processor 126 is located in the peripheral device 101 and is not a part of a USB host system as shown in Figure 2 and 3 of the present application. Processor 126 in Larky is a part of a USB dedicated circuit 124 that is located at the opposite end of the architecture (i.e. on the peripheral side) compared to the first processor 210 of the present invention, which is located on the host side.

Also, Larky's down stream USB port 106 (Figure 1) is not the same as the "downstream ports" referred to in Claim 1 of the present application. USB 106 in Larky is a Universal Serial Bus (USB) that connects computer system 100 to device controller 104 of a peripheral device 101. {Larky, Col. 3, Lines 49-52}. The downstream USB ports of Claim 1 of the present invention refer to USB ports 245 of Figure 2 that couple various USB devices (for example 320 of Figure 3 of the present application) to USB host system 200.

Furthermore, Larky does not disclose a USB host system (Fig. 2, 200) of the present invention with a direct access between the "communication area," *i.e.*, the "DCM" (Fig. 2, 220) and both the "main processor" (Fig. 3, 310; p. 8, lines 16-19) and the dedicated "first processor" (Fig. 2, 210).

The Examiner has compared DCM 220 with RAM 122 in Figure 1 of Larky. RAM 122 of Larky is different from DCM 220 and does not perform the same function as DCM 220. RAM 122 is located within the peripheral device 101, unlike the DCM 220 of the present invention that is a part of USB host system 200 (Figure 2 of the present application).

In light of the foregoing distinctions, it is respectfully submitted that the Examiner's rejection of Claims 1 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claims 2-10:**

Claims 2-10 depend from Claim 1 and are patentable over Larky for at least the foregoing reasons with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 2-10 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claim 11:**

Claim 11 is patentable over Larky for at least the same reasons given above with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claim 11 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claims 14-16:**

Claims 14-16 depend from Claim 11 and are patentable over Larky for at least the foregoing reasons with respect to Claim 11. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 14-16 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claim 17:**

Claim 17 is patentable over Larky for at least the same reasons given above with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claim 17 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claims 19-23:**

Claims 19-23 depend from Claim 17 and are patentable over Larky for at least the foregoing reasons with respect to Claim 17. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 19-23 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claim 24:**

Claim 24 is patentable over Larky for at least the same reasons given above with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claim 24 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claims 25, and 27-32, 38-40:**

Claims 25, 27-32 and 38-40 depend from Claim 24 (directly or indirectly) and are patentable over Larky for at least the foregoing reasons with respect to Claim 24. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 25, 27-32 and 38-40 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claim 41:**

Claim 41 is patentable over Larky for at least the same reasons given above with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claim 41 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claims 42 and 46-48:**

Claims 42, and 46-48 depend from Claim 41 (directly or indirectly) and are patentable over Larky for at least the foregoing reasons with respect to Claim 41. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 42, and 46-48 under 35 U.S.C. 102(e) in view of Larky, is untenable and must be withdrawn.

**Claim 49:**

Claim 49 is patentable over Larky for at least the same reasons given above with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claim 49 under 35 U.S.C. 102(e) in view of Larky is untenable and must be withdrawn.

**Claims 50-53 and 55-58:**

Claims 50-53 and 55-58 depend from Claim 49 (directly or indirectly) and are patentable over Larky for at least the foregoing reasons with respect to Claim 49. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 50-53 and 55-58 under 35 U.S.C. 102(e) in view of Larky, is untenable and must be withdrawn.

**35 USC § 103(a)**

The Examiner has rejected Claims 33, 35-37 and 44-45 under 35 USC § 103(a). The Examiner states in pertinent parts in paragraph 3 that:

"Larky does not teach the configuration data load into the device RAM (col. 8, lines 57-60). The Examiner takes official notice of the starting address being located in a different part of memory is well known in the art. {Office Action, Page 10-11}

Applicants respectfully object to the Official Notice based on the reasons provided above with respect to Claim 1. Also, Claims 33, 35-37 depend from Claim 24, and Claims 44-45 depend from Claim 41. Both Claims 24 and 41 are patentable over Larky at least for the reasons given above with respect to Claim 1.

Assuming arguendo, even if the Official Notice was proper, Claims 33, 35-37 and 44-45 will still be patentable over Larky for the reasons set forth with respect to Claim 1. Therefore, it is respectfully submitted that the Examiner's rejection of Claims 33, 35-37 and 44-45 under 35 U.S.C. 103(a) in view of Larky and the Official Notice is untenable and must be withdrawn.

WHEREFORE, each and every objection and rejection of the Office Action of June 16, 2003 having been fully addressed and overcome herein, it is respectfully submitted that this Application, including now-pending Claims 1-11, 14-17, 19-25, 27-33, 35-42, 44-53 and 55-59, is now in a condition for Allowance. An early Notice of Allowance thereof is therefore earnestly solicited by the Applicants.

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: Assistant Commissioner for Patents, Mail Stop RCE, PO Box 1450, Alexandria, VA 22313-1450, on 12/15/03.

  
\_\_\_\_\_  
Attorney for Applicant(s)

12, 15, 03  
\_\_\_\_\_  
Date of Signature

Respectfully submitted,

  
\_\_\_\_\_  
Tejinder Singh  
Attorney for Applicants  
Reg. No. 39,535